



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,166	11/13/2003	Anil D. Jha	2003P86280US	8211
56885	7590	06/09/2009		
LANDO & ANASTASI, LLP			EXAMINER	
U0105			PHASGE, ARUN S	
ONE MAIN STREET, SUITE 1100				
CAMBRIDGE, MA 02142			ART UNIT	PAPER NUMBER
			1795	
			NOTIFICATION DATE	DELIVERY MODE
			06/09/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@ll-a.com  
gengelson@ll-a.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/712,166	<b>Applicant(s)</b> JHA ET AL.
	<b>Examiner</b> Arun S. Phasge	<b>Art Unit</b> 1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 31 March 2009.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-5,7-30,32-38,49,61 and 62 is/are pending in the application.

4a) Of the above claim(s) 34-38 and 52-61 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-5,7-30,32-33,49 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 103***

Claims 1-5, 7-30, 32-33, 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emery et al. (Emery), U.S. Patent 6,482,304 in view of Horinouchi et al. (Horinouchi), U.S. Patent 5,980,716 and Gallagher et al. (Gallagher), U.S. Patent 5,736,023.

The Emery patent discloses the claimed electrochemical device comprising first and second compartments having inlet and outlets, a liquid reservoir to contain the purified and further purified water and a point of use fluidly connected to the outlet of the liquid reservoir (see figure 1 and claims 1-34). The patent further uses valves and pumps to move the water through the system (see figure 1 and col. 4, lines 48-50). The patent further uses a sensor to control the process, i.e., the volume switch to maintain the desired volume in the tank (see col. 5, lines 20-33).

The Emery patent does not disclose that the feed water is first fed to the reservoir and then through the cell. The Horinouchi patent is cited to teach the use of water directly from the reservoir as the initial feed (see figure 1 and abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Emery by the teachings of Horinouchi.

One having ordinary skill in the art would have been motivated to do this modification, because the Horinouchi patent teaches the use of a reservoir to feed the water through the purification system and recycling the purified water back to the reservoir.

The Emery patent further fails to disclose the recycle of the concentrate through the second loop back to the concentrate chambers. The Gallagher patent is cited to teach the conservation of water by the recycle of the concentrate as claimed (see col. 14, line 48 to col. 15, line 12).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Emery by the teachings of Gallagher.

One having ordinary skill in the art would have been motivated to do this modification, because the Gallagher patent teaches the conservation of water by the reuse and recycle of the concentrate through the second flow circuit.

***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun S. Phasge whose telephone number is (571) 272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Arun S. Phasge/  
Primary Examiner, Art Unit 1795

asp